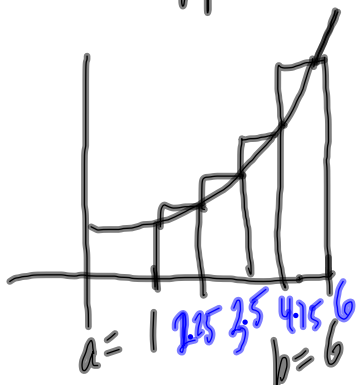


5.1 approximations to area



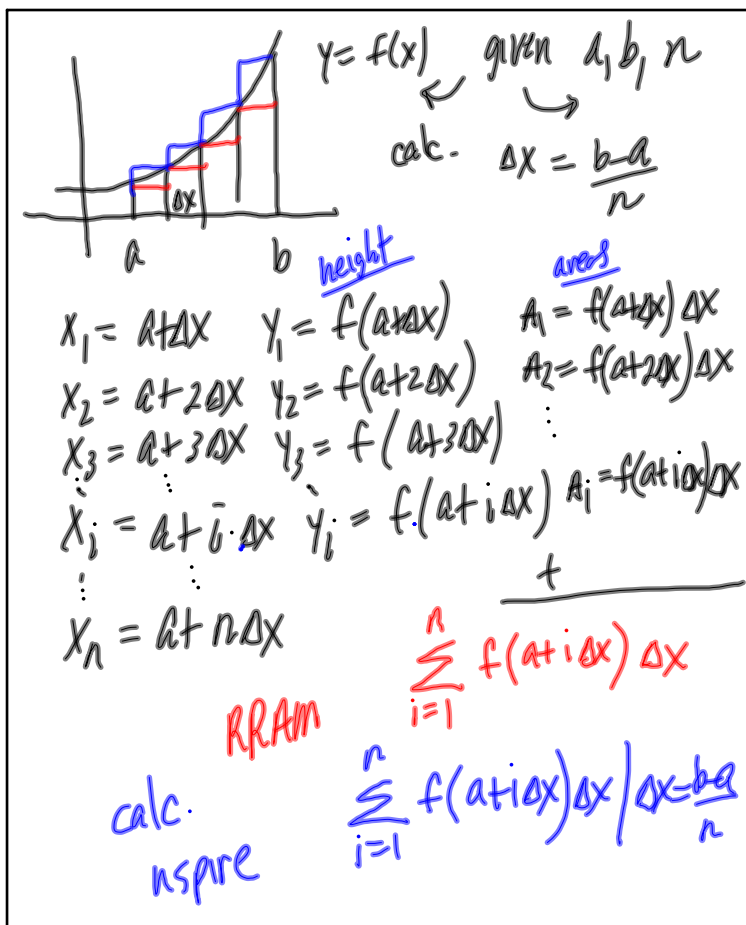
$$y = x^2 + 2$$

$$n = 4 \quad RRAM(4)$$

$$\Delta x = h = \frac{6-1}{4} = 1.25$$

$x_1 = 2.25$	$y_1 = 2.25^2 + 2 = 7.062$	$A_1 = 7.062 \cdot 1.25$
$x_2 = 3.5$	$y_2 = 3.5^2 + 2 = 14.25$	$A_2 = 14.25 \cdot 1.25$
$x_3 = 4.75$	$y_3 = 4.75^2 + 2 = 24.86$	$A_3 = 24.86 \cdot 1.25$
$x_4 = 6$	$y_4 = 6^2 + 2 = 38$	$A_4 = 38 \cdot 1.25$
		$+ \underline{\hspace{2cm}}$
		104.84

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$$L R A m = \sum_{i=0}^{n-1} f(a+i \Delta x) \Delta x \quad | \quad \Delta x = \frac{b-a}{n}$$

$$m R A m = \sum_{i=0}^{n-1} f\left(a + \frac{h}{2} + i \cdot h\right) h \quad | \quad h = \frac{b-a}{n}$$

Nov 12-10:16 AM